# KFS-1640

**Preliminary**

## *Industrial 16-Port Fast Ethernet Switch*

DIN-Rail Mounting

Panel Mounting Bracket
C03-4007-101

**Key Features:**

- Auto MDI/MDI-X crossover function on the TP copper port
- Support IEEE 802.3x flow control for full-duplex operation
- Support Back-pressure flow control for half-duplex operation
- Transparent forwarding for tagged/untagged, IGMP, RSTP/STP packets with no modification
- IEEE 802.3az Energy Efficient Ethernet (EEE)
- Wide operating temperature range for temperature critical environment
- Support DIN-Rail mounting and panel mounting
- Provide two power input types to meet more application needs
- DC power input options: +4.5 ~ +50VDC, 110VDC
- Accept wide power input voltage range for application flexibility
- Industrial-rated Emission and Immunity performance

## Specifications:

| | |
|---|---|
| Standard | IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX std. |
| Network Ports | 16 10/100 Fast Ethernet copper ports<br>Shielded RJ-45 jacks with auto-negotiation, auto-MDI/MDI-X support |
| Flow control | IEEE 802.3x pause packet for full-duplex operation<br>Back-pressure for half-duplex operation |
| Cables | 10BASE-T: Cat. 3, 4, 5 or higher (100 meters max.)<br>100BASE-TX: Cat. 5, 5e or higher (100 meters max.) |
| LEDs | Power status<br>Port link/activity status<br>Port duplex status |
| Forwarding rate | 10Base-T: 10Mbps (Half-duplex) 20Mbps (Full-duplex)<br>100Base-TX: 100Mbps (Half-duplex) 200Mbps (Full-duplex) |
| MAC Table | 8K entries |
| Packet Size | Up to 2K bytes |
| Environment | Operating Temperature: -20°C ~ 70°C (Device)<br>Storage Temperature: -20°C ~ 85°C<br>Relative Humidity: 10% ~ 90% non-condensing |
| Dimensions | 140 x 106 x 40 mm (WxDxH) |
| DC IN Voltage | KFS-1640-L: +4.5 ~ +50VDC<br>KFS-1640-H: +110VDC with polarity protection |
| DC IN Connectors | Industrial Terminal Block 5P: DC+/-, PE, PF+/- (PF: Power failure relay output)<br>DC Jack ( KFS-1640-L) |

## Ordering Informations:

| Model | DC IN | DC IN Voltage |
|---|---|---|
| KFS-1640-L | TB-5P, DC Jack | +4.5 ~ +50VDC |
| KFS1640-H | TB-5P | +110VDC |

## EMI EMS Safety Environmental Tests:

| Test | Standard | Specifications |
|---|---|---|
| FCC/EMI | FCC Rule Part 15 | Class A |
| CE/EMC/EMI | EN55022, CISPR 22 | Class A |
| CE/EMC/Harmonic | EN 61000-3-2 | < 75 W |
| CE/EMC/VFF | EN 61000-3-3 | Clause 5 |
| CE/EMC/EMS | EN 55024 | |
| ESD Test | IEC 61000-4-2 | Contact: +/-6KV Air: +/-8KV |
| RS Test | IEC 61000-4-3 | Strength: 10V/m |
| EFT/BURST | IEC 61000-4-4 | DC IN: +/-2KV TP: +/-4KV |
| Surge Immunity | IEC 61000-4-5 | DC IN: +/-1KV TP: +/-1KV |
| CS Test | IEC 61000-4-6 | Level 3 |
| Magnetic Field Imm. | IEC 61000-4-8 | 50Hz 40A/m |
| Voltage Dips Imm. | IEC 61000-4-11 | Interruption: C Dips: A |
| Safety | EN 60950, IEC 60950 | |
| Dielectric Voltage | IEEE 802.3 | TP, 1500VAC/60sec. |
| Insulation Resistance | IEEE 802.3 | TP, 500VDC/10Mohm |
| Cold Test | IEC 68-2-1 Test Ad | -20˚C, 96hrs |
| Dry Heat Test | IEC 68-2-2 Test Bd | +70˚C 40%RH 96hrs |
| Damp Heat Test | IEC 68-2-3 | +60˚C 90%RH 96hrs |
| Storage Test | IEC 68-2-48 | -20˚C 96hrs +85˚C 40%RH 96hrs |
| Vibration Test | IEC 68-2-34 | |

**FCC Part 15, Class A**
**CISPR 22 Class A**


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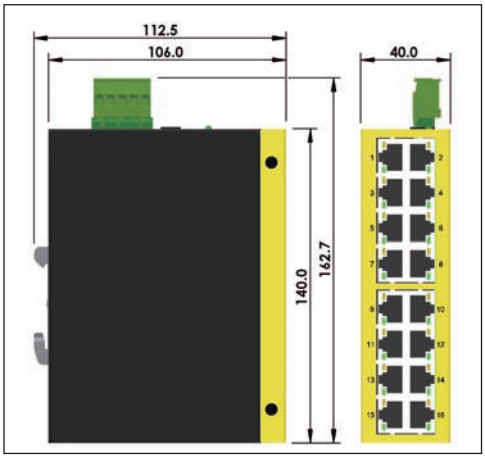
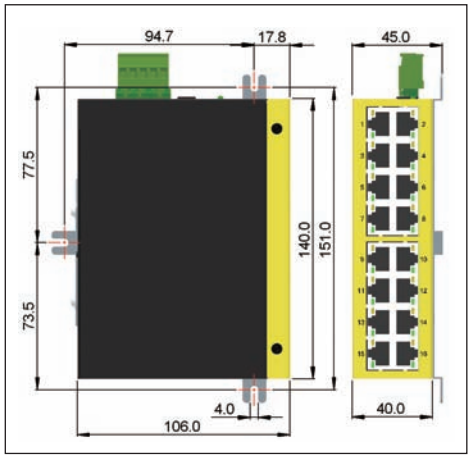
| | |
|---|---|
| Power Consumption | 9W@+12V |
| Housing | Enclosed metal with no fan |
| Mounting Support | DIN-Rail, Panel mounting (optional) |
| Approval | FCC Class A, CE mark Class A, IEC60950-1 safety, C-Tick |

## Optional Accessories:

| | |
|---|---|
| L02-0001-026 | AC Power adapters for high temperature 60˚C for Europe, Input 100 ~ 240VAC, Output 12VDC/1A, 12Watts |
| L02-0001-027 | AC Power adapters for high temperature 60˚C for USA, Input 100 ~ 240VAC, Output 12VDC/1A, 12Watts |
| KPW-2012-D-E | DIN-Rail Power Supply, Input 100 ~ 240VAC, Output 12VDC/1A 20Watts, WT -20˚C ~ 60˚C |
| C03-4007-101 | Panel mounting bracket |




DIN-Rail Mounting Dimension




Panel Mounting Dimension